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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/609,250      | 06/30/2000  | Tsuguhiro Korenaga   | 33216M050           | 2081             |

7590 10/06/2003

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| EXAMINER |
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VARGOT, MATHIEU D

|          |              |
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| ART UNIT | PAPER NUMBER |
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1732

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/609,258

Applicant(s)

KORENAGA et al.

Examiner

H. VARGOT

Group Art Unit

1732

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 7/22/03

☒ This action is FINAL.

- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 1, 2 + 5-18 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1, 2 + 5-18 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some\* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

☐ Copies of the certified copies of the priority documents have been received  
in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other \_\_\_\_\_

Office Action Summary

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5, 7, 10 and 18 are rejected under 35 U.S.C. 103 as being obvious over Greschner et al (see col. 4, lines 3-7 and the Examples; see col. 4, lines 7-10 concerning the sectional shape of the micro pattern) in view of either of Kandachi et al (see col. 3, lines 56-58) or Yanagisawa et al (see col. 5, lines 34-36 and the linear thermal expansion coefficients given for the glasses).

The claims are rejected essentially for reasons of record with these additional comments.

Applicant has cancelled claim 3 and placed same into independent claim 1. While the macroscopic depiction of the pattern is indeed rectangular as shown in Figure 3 of Greschner et al, Figure 2 therein shows that the edges of the patterns are sloped, and hence the sectional form of the pattern would be trapezoidal as noted by applicant. However, column 4, lines 7-10 indicate that Greschner et al "suggests to provide" this slope "instead of vertical edges" (ie, a rectangular form) in order to prevent jamming of the stamp and glass substrate during the cooling. This would be clearly interpreted by one of ordinary skill in the art that vertical edges have been contemplated and that the sloped form has been found to be better--in essence, a preferred embodiment. However, this does not obviate a rejection based on 103, in that obviousness only

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requires a reasonable expectation of success. The fact that rectangular sectional patterns are known by Greschner et al would suggest to one of ordinary skill in the art that they would have been used should one not expect any jamming during the cooling.

2. Claims 1, 2 and 5-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greschner et al in view of either of Kandachi et al or Yanagisawa et al, either alone, or further in view of European Patent Application 860,720 essentially for reasons already of record and for reasons set forth in paragraph 1, supra.

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's cancellation of claim 3 and incorporation thereof into independent claim 1, the amendment to independent claims 9 and 18 and applicant's arguments concerning the changes constitute sufficient reason why the rejection has been reformatted to some extent and why it is being made final. As initially interpreted, now-cancelled claim 3 was considered to have been met by Figure 3 of Greschner et al. While Figure 2 of Greschner et al does indeed show a trapezoidal sectional shape for the pattern, the discussion at col. 4, lines 7-10 shows that vertical edges or a rectangular sectional shape for the pattern has been contemplated. Hence, the claims are properly rejected under 103. Concerning instant claim 6, it would appear that such is rather easily met. Consider that the thickness  $t$  (depth of the guide tracks in Figure 1 of Greschner et al, which is apparently the same as depth  $d$  of substrate 1 in Figure 2 of the reference) is disclosed as 600 nm, or .6 microns at col. 3, line 1, whereas this is disclosed as constituting only a fraction of the height

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(h) of the stamp relief shown in Figure 2. See column 4, lines 16-18. Hence, the pattern must have a depth of much greater than .6 microns, and 1 micron or greater would be encompassed by this.

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CAR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CAR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Vargot whose telephone number is 703 308-2621.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.

M. Vargot

September 30, 2003

*M. Vargot*  
**MATHIEU D. VARGOT**  
**PRIMARY EXAMINER**  
**GROUP 1300**

*10/1/03*